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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/763,221	05/15/2001	Rolf De Vos	OYJALO-008	5384

530 7590 12/26/2001

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EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
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1731

7

DATE MAILED: 12/26/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Applicant N .

09/763,221

Applicant(s)

DE VOS ET AL.

Examiner

Steve Alvo

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over BENTVELZEN et al in view of ADMITTED PRIOR ART (specification, page 4, lines 15-24) or AT 403 704 or SIXTA et al.

BENTVELZEN et al teaches treating a stream of medium consistency pulp with gaseous bleaching agents, including ozone (column 32, lines 21-26), by passing the gaseous bleaching agent, e.g. ozone through radial extending stators. BENTVELZEN et al gives an example wherein 224 rotors rotate at a speed of 435 rpm at swept area of 72,200, see BENTVELZEN et al, column 35, lines 3-15. BENTVELZEN et al teaches that the swept area could be as low as 10,000 which could be obtained by using a rotating speed of 10,000 divided by  $72,200 \times 435$  or 60 rpm. This is not a high shear mixer. It would have been obvious to use high concentrations of ozone when bleaching as taught by the ADMITTED PRIOR ART or AT 403 704 or SIXTA et al.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over BENTVELZEN et al in view of ADMITTED PRIOR ART (specification, page 4, lines 15-24) or AT 403 704 or SIXTA et al as applied to claim 7 above, and further in view of CHENG.

CHENG teaches using a porous metal injector to disperse a gas into a liquid. It would have been obvious to use the distribution injector or nozzle of CHENG to distribute the ozone

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gas of BENTVELZEN et al into the pulp slurry. It would have been obvious to use any known injection gaseous injection means to inject the ozone gas of BENTVELZEN et al.

Claims 7-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "from pressurized oxygen" is indefinite. Does this mean that the ozone is formed from pressurized oxygen or that the ozone is pressurized with oxygen carrier gas? Clarification is required.

FLECK et al cited to teach adding bleaching gases to medium consistency pulp without a high shear mixer.

RICHTER cited to teach radial adding (15) bleaching agent to medium consistency pulp without a high shear mixer.

When filing an "Official" FAX in Group 1730, please indicate in the Header (upper right) "Official" for papers that are to be entered into the file. The "Official" FAX phone numbers for this TC 1700 are:

**Non-Final Fax: 703-872-9310      After-Final FAX: 703-872-9311**

When filing an "Unofficial" FAX in Group 1730, please indicate in the Header (upper right) "Unofficial" for Draft Documents and other Communications with the PTO that are not for entry into the file of the application. This will expedite processing of your papers. The "Unofficial" FAX phone number for this Art Unit (1731) is 703-305-7115.

Any inquiry concerning this communication or earlier communications from the **primary examiner** should be directed to **Steve Alvo** whose telephone number is **703-308-2048**. The Examiner can normally be reached on Monday - Friday from **6:00 AM - 2:30 PM (EST)**.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Stanley Silverman, can be reached on 703-308-3837.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Group receptionist** whose telephone number is **703-308-0661**.

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MSA  
12/17/01



**STEVE ALVO**  
**PRIMARY EXAMINER**  
**ART UNIT 1731**